ASSIGNMENT 3

Textbook Assignment: "Engineering Operations," chapter 4, all. and "Engineering Material," chapter 5, pages 5-1 through 5-41.

- 3-1. What term best describes operational reliability, fuel, feed and freshwater performance, and the ability to control casualties?
 - 1. Engineering trials
 - 2. Sound engineering practice
 - 3. Engineering readiness
 - 4. Technical knowledge
- 3-2. The operation of the engineering plant at normal pressures and temperatures with minimal speed changes achieves what benefit?
 - 1. Overall plant performance, reliability, and efficiency
 - 2. Fewer casualties
 - 3. Smaller watch teams
 - 4. Improved teamwork throughout the engineering department
- 3-3. The engineer officer should require that a tabular record of normal feedwater and potable water consumption be kept for ready reference in what part of the ship?
 - 1. The log room
 - 2. Main engine control
 - 3. Damage control central
 - 4. The ship's office
- 3-4. Prescribed acceleration tables should be strictly adhered to in order to
 - 1. maximize control of the ship
 - 2. save fuel and extend machinery life
 - 3. allow maximum flexibility of machinery configuration at all speed changes
 - 4. prolong the period between boiler cleaning

- 3-5. You can best maintain proper water analysis and prevent scale formation by which of the following means?
 - 1. Blow tubes weekly
 - 2. Backfill the boiler as required
 - 3. Surface blow the boiler as needed
 - 4. Bottom blow the boiler weekly
- 3-6. Fireside cleaning of the boiler may be delayed until overhaul by which of the following means
 - 1. Use distillate fuel only and maintain proper water chemistry
 - Use distillate fuel only, conduct periodic inspections of refractory, and be sure refractory has few deposits at 1800 hours
 - 3. Conduct bottom blows and chemically treat as necessary after securing the boiler
 - 4. Maintain proper fuel/air mixture, inspect atomizers, and prevent air casing leakage
- 3-7. Combustion efficiency within a boiler is reduced by which of the following conditions?
 - 1. Excessive superheater outlet temperatures
 - 2. Excess air entering the fuel register
 - 3. Improper fuel\air ratios
 - 4. Excess air entering the boiler any place other than at the burner register

- 3-8. You can determine the true combustion efficiency of a boiler by which of the following means?
 - Watch the condition of the fire and stack
 - 2. Inspect boiler for air casing leaks
 - Conduct bottom and surface blows and maintain proper boiler chemistry
 - 4. Maintain proper fuel oil pressure
- 3-9. Excessive bearing wear can best be prevented by which of the following means?
 - Maintain lube oil cooler outlet temperature between 120° and 130".
 - 2. Inspect bearing wear according to prescribed PMS procedures
 - 3. Purify lube oil storage tanks weekly
 - 4. Sample lube oil daily
- 3-10. The efficiency of a condenser and its component auxiliaries will be reduced by which of the following actions?
 - Use minimum amounts of cooling water
 - 2. Maintain a unifom flow of steam to the air ejectors
 - 3. Recirculate condensate excessively
 - 4. Maintain minimum operational speeds for auxiliary pumps
- 3-11. When, if ever, are you permitted to disable a safety device on operating machinery?
 - 1. When training personnel
 - 2. While lighting off the engineering plant
 - 3. While conducting ECC drills
 - 4. Never

- 3-12. The posting of engineering department safety precautions in a conspicious and accessible place is the responsibility of what officer(s)?
 - 1. The engineer officer
 - 2. The division officers
 - 3. The safety officer
 - 4. The commanding officer
- 3-13. When engineering personnel work outside the engineering department, who has the responsibility to train them and enforce safety precautions?
 - 1. The engineering division officer
 - 2. The LCPO
 - 3. The MPA
 - 4. The department head controlling the operation
- 3-14. What is the purpose of securing schedules?
 - 1. They provide a time effective way to secure the engineering plant
 - 2. They ensure the engineering plant is not secured too quickly
 - 3. They provide a means to determine watch qualifications
 - 4. They increase the life cycle of machinery
- 3-15. Warm-up and securing schedules are **NOT** required for which of the following ships?
 - 1. Noncombatant ships
 - 2. Reserve combatant ships
 - 3. Auxiliary ships
 - 4. Ships covered by EOSS

QUESTIONS 3-16 THROUGH 3-27 REFER TO ENGINEERING READINESS TRIALS.

- 3-16. Self-observation of full power and fuel economy trials is permitted under which of the following conditions?
 - 1. When directed by NAVSEA
 - 2. When it is not practical to provide observers from another ship
 - 3. When recommended by TYCOM
 - 4. During independent operations
 - A. The chief observer
 - B. The assistant chief observer
 - C. The assistant observer
 - D. The observing party
 - C. The chief engineer

Figure 3A

IN ANSWERING QUESTIONS 3-17 THROUGH 3-21, CHOOSE FROM FIGURE 3A THE PERSON OR PARTY THAT HAS THE RESPONSIBILITY DESCRIBED IN THE QUESTION.

- 3-17. Reviews fuel soundings, counter readings, logs, and records.
 - 1. A
 - 2. B
 - 3. C
 - 4. D
- 3-18. Instructs, organizes, and stations the observing party.
 - 1. A
 - 2. B
 - 3. C
 - 4. D
- 3-19. Requests a system that ensures simultaneous signals of fuel soundings, counters, and meters to be taken.
 - 1. A
 - 2. C
 - 3. D
 - 4. E

- 3-20. Ensures that all incorrect recording are corrected.
 - 1. A
 - 2. C
 - 3. D
 - 4. E
- 3-21. Verifies and includes within the trial report any violation of trial instructions or sound engineering practices.
 - 1. A
 - 2. B
 - 3. C
 - 4. E
- 3-22. During the full-power trial, if the rpm is not held constant or is interrupted, you should take what action?
 - 1. If the interruption is for minor equipment failure, continue the trial
 - 2. If the cause can be determined and corrected within 5 minutes, resume when ready
 - 3. Record as unsatisfactory and begin new trial
 - 4. Extend the length of trial to cover the lost time
- 3-23. The engineer officer should report the condition of the engineering plant to the commanding officer within what maximum number of days before the trial date?
 - 1. One
 - 2. Two
 - 3. Three
 - 4. Four
- 3-24. What authority furnishes requirements for engine speed at various displacements and injection temperatures?
 - 1. The engineer officer
 - 2. The CNO
 - 3. The TYCOM
 - 4. The Deputy Chief of Naval
 Operations for Fleet Operations
 and Readiness

- 3-25. During a full-power trial, readings must be recorded at what intervals of time?
 - 1. 15 min
 - 2. 30 min
 - 3. 45 min
 - 4. 60 min
- 3-26. The official full power trial should NOT officially begin until which of the following conditions is/are met?
 - 1. The ship is up to full power and steaming independently
 - 2. The ship is within 15 rpm of designed full power
 - 3. The ship is at full power and all readings are constant
 - 4. Two sets of readings have been taken and verified correct by the chief observer
- 3-27. What is the purpose of the engineering plant acceleration table?
 - 1. To ensure proper coordination throughout the full-power trial
 - 2. To demonstrate the ship's ability to answer all emergency bells
 - 3. To prevent boilers from overloading
 - 4. To set and check boiler firing rate to design specifications

QUESTIONS 3-28 THROUGH 3-39 REFER TO PREADINESS INSPECTIONS, PEB, AND INSURV INSPECTIONS.

- 3-28. Engineering readiness inspection checklists are divided into what three sections?
 - 1. Machinery, administration, and auxiliary
 - 2. Electrical, machinery, and auxiliary
 - 3. Damage control, machinery, and electrical
 - 4. Administration, damage control, and machinery

- A. Operational Readiness Inspection
- B. Administrative Inspection
- C. Material Inspection
- D. Operational Propulsion Plant Board
- E. INSURV Material Inspection
- F. INSURV Surveys

Figure 3B

IN ANSWERING QUESTIONS 3-29 THROUGH 3-33, CHOOSE THE INSPECTION IN FIGURE 39 THAT IS DESCRIBED IN THE QUESTION.

- 3-29. Performed on ship's returning from a foreign station, at 3-year intervals, or when the fitness of the ship is in doubt.
 - 1. A
 - 2. C
 - 3. E
 - 4. F
- 3-30. Verifies adherence to propulsion plant readiness standards and ensures proper operation and safety.
 - 1. B
 - 2. D
 - 3. E
 - 4. F
- 3-31. Evaluates the actual material condition of a ship's equipment, machinery, and fittings.
 - 1. C
 - 2. D
 - 3. E
 - 4. F
- 3-32. The inspections that are included in readiness inspections.
 - 1. A, B, and C
 - 2. B, C, and F
 - 3. B. D. and E
 - 4. C, E, and F

- 3-33. Evaluates the ship's administrative procedures.
 - 1. A
 - 2. B
 - 3. C
 - 4. E
- 3-34. Engineering casualty control drills are not required for which of the following inspections?
 - 1. Material readiness
 - 2. Operational readiness
 - 3. LOE
 - 4. OPPE
- 3-35. An INSURV inspection is scheduled about how many months before the next scheduled overhaul?
 - 1. Two to three
 - 2. Two to four
 - 3. Three to six
 - 4. Four to six
- 3-36. When does an official INSURV inspection begin?
 - 1. Promptly upon the arrival of the board if the ship is moored to a pier or dock
 - 2. When the chief observer receives all pertinent logs and reports of machinery conditions
 - 3. During the first week of the scheduled upkeep
 - 4. When the engineering plant has corrected all major discrepancies observed by the advanced INSURV team
- 3-37. The INSURV board senior member sends the inspection results and findings to which of the following authorities?
 - 1. The appropriate TYCOM
 - 2. NAVSEASYSCOM
 - 3. The president of Surface Warfare Readiness Group
 - 4. The president of the INSURV board

- 3-38. When a ship is found to have a major operational discrepancy, the senior member of an INSURV inspection board reports that fact to what person?
 - 1. The Chief of Naval Operations
 - 2. The President of the Board of Inspection and Survey
 - 3. The TYCOM
 - 4. The commanding officer
- 3-39. EOSS has how many major subsystems?
 - 1. One
 - 2. Two
 - 3. Three
 - 4. Four
- 3-40. The development of the EOP includes which of the following parameters?
 - 1. Not all engineering equipment is made operational
 - 2. Written operational steps are prepared for under-instruction watch standers to stand watch under emergency condition
 - 3. Only authorized weapons support systems alterations are recognized
 - 4. Valves are labeled according to SIB
- 3-41. EOSS was established as the basic guide for operational procedures and casualty control for the engineering plant by what instruction?
 - 1. OPNAVINST 9000.1
 - 2. SECNAVINST 5430.11
 - 3. OPNAVINST 9200.3
 - 4. OPNAVINST 4790.11

- 3-42. EOSS provides the propulsion plant watch stander procedures to identify and correct which of the following casualties?
 - 1. All engineering plant casualties
 - 2. The most common occurring and comprehensive casualties
 - 3. Simultaneous casualties occurring in the fireroom and engine room
 - 4. Cascading casualties within the space the casualty occurs

In answering questions 3-43 through ● 3-7I, refer to text chapter 5, pages 5-1 through 5-13.

- 3-43. Specified common use commodities or services for the Department of Defense are controlled and managed by what authority?
 - 1. The Ship Configuration and Logistics Support Agency
 - 2. The Defence Logistics Agency
 - 3. The Navy Supply System
 - 4. The Supply Control Demand Agency
- 3-44. The Navy supply support system is divided into which of the following parts?
 - 1. Material Commands and Navy Supply System
 - 2. NAVSEA and Central Control Point Agency
 - 3. NAVSUP and Direct Acquisitions Agency
 - 4. Primary End-use Item control Agency and Statistical Defense Logistics Control Agency
- 3-45. Technical direction over supplies of specific interest to them is usually controlled by which of the following organizations?
 - 1. NAVSEA, NAVSUP, NAVELEX, BUMED
 - 2. NAVEDTRA, NAVSYS, NAVSUP, NAVSEA
 - 3. NAVSEA, BUMED, NAVELEX, NAVAIR
 - 4. NAVSUP, NAVSEA, NAVINST, NAVSYSCOMH

- 3-46. The first four numbers of a national stock number provide what information?
 - 1. The FSC
 - 2. The FSC group
 - 3. The FSCN class
 - 4. The repair part control number
 - A. Equipment
 - B. Equipage
 - C. Repair part
 - D. Consumable
 - E. Services

Figure 3C

IN ANSWERING QUESTIONS 3-47 THROUGH 3-51, SELECT FROM FIGURE 3C THE TYPE OF MATERIAL THAT IS DESCRIBED IN THE QUESTION.

- 3-47. Functional equipment(s), systems, or sub-systems that are identified by a (CID/APL)
 - 1. A
 - 2. B
 - 3. D
 - 4. E
 - 3-48. They appear in an APL, manufacturer's tech/instruction manual, or similar parts list.
 - 1. A
 - 2. B
 - 3. C
 - 4. D
 - 3-49. High cost items, vulnerable to pilferage, essential to ships mission, and personnel safety hazards.
 - 1. B
 - 2. C
 - 3. D
 - 4. E
 - 3-50. Operational requirements such as commercial telephone, pilotage, and equipment rental.
 - 1. B
 - 2. C
 - 3. D
 - 4. E

- 3-51. Common tools, administrative, supplies, and housekeeping items.
 - 1. B
 - 2. C
 - 3. D
 - 4. E
- 3-52. The last nine digits of the NIIN identifies the NSN in what organization?
 - 1. The Navy Supply System
 - 2. The Defense Logistics Agency
 - 3. The Federal supply distribution system
 - 4. The material commands
- 3-53. The requirement to name, classify, describe, and number all items, and to publish catalogs, stock and identification lists identifies what organization or system?.
 - 1. The Naval supply system
 - 2. The Equipage Allowance List
 - 3. The Federal Catalog System
 - 4. The Defense Logistics Agency
- 3-54. The first number of the cognizant code provides what information?
 - 1. The transaction account
 - 2. The stores account
 - 3. The location parts not carried onboard
 - 4. The defense allocation priority
- 3-55. The source of quality control, a technical design or configuration model, and special controls for receipt, inspection, test, storage, or issue are identified in what code number?
 - 1. NCB
 - 2. NSN
 - 3. FSC
 - 4. SMIC
- 3-56. To identify material used by engineering personnel, you should primarily use what publication?
 - 1. NAVSUP 485
 - 2. NAVSEA 09-1348
 - 3. COSAL
 - 4. MSDS

- 3-57. Ships can achieve maximum operating capabilities for extended periods of time without external logistical support because of what document?
 - 1. The Material Maintenance Manual
 - 2. The Coordinated Shipboard Allowance List
 - 3. The Equipage Allowance List
 - 4. The Federal Material Management and Procurement Manual
- 3-58. The responsibility for material, custody records, and accountability for items of controlled equipage are determined by what list(s)?
 - 1. Allowance Lists
 - 2. Inventory Control Lists
 - 3. Accountability and Procurement List
 - 4. Control Material Maintenance List
- 3-59. The COSAL is divided into how many parts?
 - 1. One
 - 2. Two
 - 3. Three
 - 4. Four
- 3-60. The Summary of Effective Allowance Parts/Equipage List is used to check what part of a new COSAL?
 - 1. I
 - 2. II
 - 3. III
 - 4. III-Section A
- 3-61. What sections of the COSAL, part 11, contain the exact same information to provide a crossindex of all APL/AELs?
 - 1. A and C
 - 2. B and C
 - 3. C and D
 - 4. A and B

- 3-62. The prefix "P" on an APL number provides what information about the APL?
 - 1. It is being discontinued
 - 2. It has been assigned a priority end-point user request code
 - 3. It is incomplete
 - 4. It has been assigned a designator control number
- 3-63. The primary difference between an APL and an AEL is that the AEL lists the equipage and supplies needed to operate the ship, while the APL provides what information?
 - 1. Statistical data on equipment use
 - 2. Technical data on equipment and identification of repair parts
 - 3. An inventory of equipment
 - 4. An inventory of repair parts
 - A. Stock Number Sequence List
 - B. Alternate Number Cross
 Reference to Stock Number
 - C. COSAL Maintenance
 - D. Supply Publications
 - E. Navy Management List
 - F. Master Cross-reference List
 - G. Master Repairable Item List
 - H. Afloat Shopping Guide
 - I. Identification List

Figure 3D

IN ANSWERING QUESTIONS 3-64 THROUGH 3-71, SELECT FROM FIGURE 3D THE DOCUMENT THAT IS BEST DESCRIBED IN THE QUESTION.

- 3-64. Used to update the ship's configuration baseline.
 - 1. A
 - 2. B
 - 3. C
 - 4. D

- 3-65. Used by the supply officer to determine what repair parts to stock?
 - 1. A
 - 2. B
 - 3. C
 - 4. D
- 3-66. Provides a means to submit accurate data to ensure you receive the supplies you requested.
 - 1. C
 - 2. D
 - 3. E
 - 4. F
- 3-67. A microfiche listing that provides item descriptions and related data required to identify or select items of supply?
 - 1. B
 - 2. F
 - 3. H
 - 4. I
- 3-68. Provides a means to locate an item's assigned NSN from a manufacturer's part drawing number?
 - 1. B
 - 2. E
 - 3. F
 - 4. G
- 3-69. Helps identify Navy-managed, mandatory turn-in repairable items and pertinent movement priority designators?
 - 1. F
 - 2. G
 - 3. H
 - 4. I
- 3-70. Contains basic management data needed to prepare requisitions?
 - 1. B
 - 2. D
 - 3. E
 - 4. F

- 3-71. Relates an item of supply to the NSN that is **NOT** normally related to a part or reference number?
 - 1. C
 - 2. D
 - 3. H
 - 4. I